



Griffith Environmental Consulting Inc.  
5089 Hedges Drive  
Helena, MT 59602  
406-458-5720  
406-459-4830 (cell)  
email: [egriffithgec@gmail.com](mailto:egriffithgec@gmail.com)

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Mr. Dave Skiff  
Ezzie's Wholesale Inc.  
P.O. Box 1770  
Malta, MT 59538

**RE: Work Plan for the Completion of Five (5) 2-inch Monitoring wells and the abandonment of Three (3) Others at the former Robertson Oil (Ezzie's Big Sandy Bulk Facility) at 418 Judith Landing Road, Big Sandy, MT. Facility #08-00855, Releases #1233 and 4614, Work Plan #33823.**

Dear Mr. Skiff:

Pursuant to Mr. McCurry's request for a work plan for the completion of soil borings and wells at the above facility to improve the ground-water data base, I have prepared the following description of the planned work. Based on previous discussions, well placement and construction are very critical factors because of the heavy truck traffic near the fueling islands.

Regardless of who the drilling contractor is, the wells will be bored and completed according to the DEQ protocols by a licensed driller. Bid specifications have been sent out with a time bound response requested. Since I have chosen to go with 20"x20"x20" steel vaults which I will assist in installing with my associate, some modification of the well completion unit costs may change.

#### **Soil Borings**

In keeping with the policies of the DEQ, the borings will be drilled with a 4-inch hollow stem auger to a depth 5 feet or more below the top of the areal ground water table. For this site, I have estimated the depth to ground water to be between 5 and 10 feet below the ground surface. Split spoon soil samples will be collected from 5 feet below ground surface (bgs) to the horizon displaying the highest organic vapor readings based on heated head-space screening using a Mini Rae PID A second sample will be collected as close to the water table horizon as is possible. Those borings proximal to the fueling islands will be sampled from the surface on down. The boring would then be completed as a 2-inch monitoring well. Soil samples will be collected from all five borings and analyzed for VPH constituents as well as screened for EPH.

#### **Monitoring Well Completion**

The planned borings will be completed as a 2-inch PVC monitoring wells. To ensure that ground-water elevation changes are reflected in the screened portion of the well, the well will have 10 feet of 0.010 inch slotted screen sand packed with 10/20 sand from 15 feet bgs to about 4 feet bgs. The solid casing will be sealed with hydrated bentonite chips from 1 foot to 4 feet bgs to allow for placement of a sand base for the flush

mount. For the two vaulted wells, the bentonite will be brought up to about 2 feet and the vault set in concrete. I anticipate that about 1.2 cubic yards of concrete will be necessary to complete the vault installation. Each completed vault will then be isolated with the use of very visible traffic cones and allowed to cure for at least 7 – 10 days.

Upon completion, all the wells will be surveyed to a permanent fixture (ie, dispenser island or a nail in a power pole) to establish an artificial benchmark from which the top of casing (TOC) well elevations can be established.

### **Well Development and Sampling**

The new wells will be developed by surge bailing and pumping a minimum of 5 gallons of water, if possible. Due to the tight nature of the glaciated Cretaceous shales, development of the wells will be conducted immediately upon completion so that the wells will have time to acclimate for a few hours before sampling the next day. All the wells will be sampled by low flow methods using a peristaltic pump.

### **Data Validation**

Once the lab soil data are received, I will review the data to ensure that they meet the standards required by the DEQ. This new task consists of filling out a four (4) page form detailing the QA/QC data from the EPA approved lab and ensuring that the lab's procedures are being followed.

### **Release Closure Plan**

Another document now required by the DEQ is a Release Closure Plan (RCP) which tracks the release history and is a critical path method to select the best remedial method if one is needed. As with the data validation form, this form is at a minimum a four (4) page Excel spread sheet that takes considerable time to complete. Both the data validation form and the RCP table will be added to the main report as appendices and will be billed as separate tasks.

### **Report Preparation**

Upon receipt of the soil analytical results, **gec** Inc. will prepare a fully detailed report (AR-03) on the soil conditions encountered during well boring and completion. Whenever possible, data specific figures will be used to present the results and provide data interpretations.

If the soil boring data show that there are very low or obviously low levels of contamination from the soil borings, a careful review of the ground-water data will be conducted to understand the relationship between the soil and the aquifer water data.

Work Plan Prepared by:

Earl F. Griffith PG

Wyoming # 1033

cc: Mr. Donnie McCurry